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12
13 UNITED STATES DISTRICT COURT

14 NORTHERN DISTRICT OF CALIFORNIA

15 SAN FRANCISCO DIVISION

16
17 GOOGLE LLC,

18 Plaintiff,

19 vs.

20 SONOS, INC.,

21 Defendant.

Case No. 3:20-cv-06754-WHA

Related to Case No. 3:21-cv-07559-WHA

**GOOGLE LLC'S REPLY IN SUPPORT
OF ITS MOTION TO STRIKE
PORTIONS OF THE EXPERT REPORTS
OF DOUGLAS SCHMIDT**

Date: March 9, 2023

Time: 8:00 a.m.

Location: Courtroom 12, 19th Floor

Judge: Hon. William Alsup

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Heavy on rhetoric but light on substance, Sonos’s opposition fails to meaningfully address the arguments in Google’s motion to strike. Forced to admit that every theory to which Google objected was in fact new and undisclosed, Sonos instead attempts to blame Google’s experts’ and interrogatory responses for its belated infringement disclosures. But Sonos cannot blame Google’s discovery conduct for a failure to disclose infringement contentions that *Sonos* did not disclose until its expert reports. Sonos should not be permitted to introduce new infringement theories that do not comply with this District’s local rules. Google’s motion to strike should be granted.

I. ARGUMENT

A. Purported Claim Constructions First Introduced In Sonos’s Rebuttal Validity Report Should Be Struck

Dr. Schmidt opined in his opening infringement report that “the Watch Next queue amounts to ‘a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service’ because (i) it constitutes a list of one or more media items selected for playback, (ii) it is not local to the YouTube Sender (or the Receiver that ultimately takes over playback responsibility), and (iii) it is provided by the YouTube cloud infrastructure that comprises a plurality of cloud servers.” Ex. 1 (Schmidt Op. Rpt.) ¶ 241. After viewing Google’s opening report on invalidity, Dr. Schmidt introduced four new requirements that a playback queue must satisfy for the first time in his rebuttal report: that it “is the list of media items that is used for playback”; “contains the entire list of media items selected for playback”; “is not being used merely to process the list of media items for playback”; and “is the queue that ‘runs the show.’” Ex. 2 (Schmidt Reb. Rpt.) ¶ 107. Sonos does not dispute that it never (i) proposed a construction of “playback queue” that includes the purported limitations, (ii) identified these purported limitations in its infringement contentions, or (iii) identified these purported limitations in its validity contentions. *See* Opp. at 3-7. In fact, Sonos admits that Dr. Schmidt did not “expressly articulate” the four new limitations from Dr. Schmidt’s rebuttal report in his opening report. *See* Opp. at 3. On this basis alone, Dr. Schmidt’s constructions offered for the first time in his rebuttal report regarding “playback queue” should be struck. Sonos’s arguments to the contrary are unavailing.

1. Dr. Schmidt’s New Requirements For A Playback Queue Were Not Present In His Opening Report On Infringement

1 Although Sonos concedes that Dr. Schmidt did not “expressly articulate” his four added
2 requirements of the playback queue in his opening expert report, Sonos argues that these
3 requirements were inherently present in that report. Opp. at 4-6. But the passages that Sonos points
4 to in support of its argument are not even within the “Infringement Analysis” section of the
5 report. And regardless, those passages simply do not disclose the four added requirements.

6 First, Dr. Schmidt’s opening infringement report does not address his new requirement that
7 the playback queue is “the list of media items that is used for playback.” Sonos introduced this
8 purported requirement in his rebuttal report, explaining that it required analyzing “which queue” an
9 accused application uses for playback (its local playback queue or remote playback queue). Ex. 2
10 (Schmidt Reb. Rpt.) ¶ 103. Although Sonos points to two paragraphs of Dr. Schmidt’s opening
11 report for some sort of inherent disclosure of this requirement (Opp. at 5 (citing Opp., Ex. 1 ¶¶ 125-
12 126)), they do not describe the requirement or explain how it is met. There is no mention of any
13 “queue” in these paragraphs, much less an analysis of whether a computing device in the accused
14 YouTube applications uses its local, as opposed to, remote queue for playback. Rather, those
15 paragraphs include generic statements regarding the accused “YouTube cloud infrastructure.” Opp.,
16 Ex. 1 ¶¶ 125-126. This is in sharp contrast to Dr. Schmidt’s application of his new purported
17 requirement in his invalidity rebuttal report, where he discussed the operation of the “remote” and
18 “local” playback queue in the prior art and argued why only the “local” playback queue is “used for
19 playback.” Cf. Ex. 2 (Schmidt Reb. Rpt.) ¶¶ 202, 208-211.

20 Second, Dr. Schmidt’s opening report on infringement does not address his second new
21 additional requirement that the playback queue “contains the entire list of media items selected for
22 playback.” The sole paragraph from Dr. Schmidt’s opening report that Sonos cites for some implicit
23 disclosure of this requirement (Opp. at 5 (citing Opp., Ex. 1 ¶ 127)) does not state that a playback
24 queue must “contain the entire list of media items selected for playback” let alone show how the
25 purported requirement is met in the accused YouTube systems. To the contrary, the paragraph states
26 that when a “client” (*e.g.*, a mobile phone) plays back a “long playlist,” it receives messages
27 containing a “portion” of the “playlist” followed by messages containing a portion of the “autoplay”
28 list. Opp., Ex. 1 ¶ 127. Showing that messages are used to send a “portion” of the list is clearly not

1 a disclosure of Dr. Schmidt’s new requirement that the *entire* list of media items is stored.

2 Further, Dr. Schmidt’s opening report on infringement suggests that there is ***not*** an “entire
3 list” requirement, despite Dr. Schmidt’s later adoption of such a requirement in his rebuttal report
4 on validity. Dr. Schmidt’s opening report accuses the YouTube applications of infringing when a
5 user selects an auto-generated playlist containing an “infinite” number of media items for
6 playback. *See* Ex. 1 (Schmidt Op. Rpt.) ¶ 492. But Dr. Schmidt never explains in his opening report
7 (or elsewhere) how an “infinite” playback queue could include the “entire list of media
8 items.” Indeed, as a practical matter, this would be impossible.

9 Third, Dr. Schmidt’s opening report does not address his additional requirement that the
10 playback queue is “not being used merely to process the list of media items for playback.” Sonos
11 points to two paragraphs that discuss the accused YouTube applications (Opp. at 6 (citing Opp., Ex.
12 1 ¶¶ 128-129)), but those simply state that a “Sender” device (*e.g.*, a mobile phone) maintains a
13 “local queue” in the accused YouTube systems. *Id.* This does not disclose in any way the notion
14 that a mobile device is not configured for playback if it has a local playback queue that is “used
15 merely to process the list of media items for playback.” The only other paragraph Sonos points to
16 (*id.* (citing Opp., Ex. 1 ¶ 484)) pertains to non-infringing alternatives (not the accused YouTube
17 applications), and includes a conclusory statement hypothesizing that the “alternative could be
18 nothing more than a Sender having the means to process the list of media items.” But Sonos did not
19 analyze this purported issue at all when discussing the *accused* YouTube applications; that analysis
20 appears only in Dr. Schmidt’s reply report. Ex. 3 (Schmidt Reply Rpt.) ¶¶ 59, 135, 137-138.

21 Fourth, the only paragraphs that Sonos points to in Dr. Schmidt’s opening report that
22 purportedly disclose his additional requirement that the playback queue is the “queue that ‘runs the
23 show’” (Opp. at 6 (citing Opp., Ex. 1 ¶¶ 480, 484)) merely discuss non-infringing alternatives, and
24 neither mentions the phrase “runs the show” or states that this is a requirement of a playback
25 queue. It is only in Dr. Schmidt’s reply report that he discusses this purported requirement. Ex. 3
26 (Schmidt Reply Rpt.) ¶¶ 38, 46, 60-63, 132, 136-142, 177.

27 Finally, conceding what is shown above—that none of the cited paragraphs in Dr. Schmidt’s
28 opening report “expressly articulate” Dr. Schmidt’s four new purported requirements for a playback

1 queue—Sonos argues that its late disclosure should be excused because those new requirements are
 2 responsive to opinions from Google’s expert Dr. Bhattacharjee. Opp. at 4. But that is nonsensical—
 3 it is Dr. Schmidt who expressly added requirements to the Court’s claim construction of playback
 4 queue, not Dr. Bhattacharjee. Indeed, Sonos has not identified any specific opinion of Dr.
 5 Bhattacharjee that it contends is inconsistent with the Court’s Orders in this case. And Sonos’s
 6 citation to *MasterObjects, Inc. v. Meta Platforms, Inc.*, No. C 21-05428 WHA, 2022 WL 4856269,
 7 at *4 (N.D. Cal. Oct. 3, 2022), Opp. at 4, does not help its cause. In *MasterObjects*, this Court
 8 refused to strike certain portions of a plaintiff’s reply expert report where (i) it contained technical
 9 opinions directly responsive to the rebuttal expert report of defendant’s expert and (ii) the Court
 10 could not conclude that the reply report included “new theories.” *Id.* at *4. But neither circumstance
 11 is present here: Sonos has not identified or explained how Dr. Schmidt’s new requirements are
 12 responsive to any particular opinion of Dr. Bhattacharjee, and Sonos concedes that Dr. Schmidt’s
 13 additional requirements were not expressed in his previous report. The new claim construction
 14 opinions should be struck.

15 2. The Specific Paragraphs Of Dr. Schmidt’s Rebuttal And Reply Reports
 16 Identified By Google Should Be Struck

17 Silent on paragraphs 17, 59, 136-138, and 142 of Dr. Schmidt’s reply report on
 18 infringement, Sonos’s opposition appears to concede that they contain the problematic claim
 19 construction opinions regarding the “playback queue” at issue here. *See* Ex. 3 (Schmidt Reply Rpt.)
 20 (highlighted in green). Although Sonos resists Google’s request to strike additional paragraphs in
 21 Dr. Schmidt’s reports (Opp. at 7-8), all of those paragraphs expressly refer to Dr. Schmidt’s new
 22 purported requirements for the “playback queue.”

23 More specifically, the paragraphs in Dr. Schmidt’s invalidity rebuttal report that deploy his
 24 new requirements for the “playback queue” in an attempt to distinguish invalidating prior art while
 25 maintaining purported infringement of the accused products should be struck. *See, e.g.*, Ex. 2,
 26 (Schmidt Reb. Rpt.) (highlighted in blue) ¶ 132 (opining that Google’s YouTube cloud
 27 infrastructure infringes because “the Watch Next queue ‘runs the show’ for the Sender and
 28 Receiver”), ¶ 329 (opining that the remote “party queue” in the prior art YTR is not a “playback

1 queue” because a “local” copy is allegedly the queue that is used for playback); ¶ 1005 (opining
 2 that infringement cannot be avoided by the presence of a local queue if there is also a “remote
 3 playback queue *provided by* a cloud-based computing system . . . that ‘runs the show’”) (emphasis
 4 in original);

5 The paragraphs identified by Google in Dr. Schmidt’s infringement reply report should also
 6 be struck because they purportedly respond to Dr. Bhattacharjee’s non-infringement positions but
 7 do so using the new requirements introduced in Dr. Schmidt’s rebuttal report that the “playback
 8 queue” cannot be used “merely to process the list of media items for playback” and is the queue
 9 that “runs the show.” Ex. 3 (Schmidt Reply Rpt.) (highlighted in blue) ¶¶ 38, 39, 46, 60, 62, 63, 65,
 10 68, 128-130, 177, 184, 188. Similarly, paragraphs 139, 140, 141, 177, and 184 of his infringement
 11 reply report should also be struck because they improperly inject the requirement that the “playback
 12 queue” be “the list of media items that is used for playback.” *Id.* (highlighted in blue).¹

13 **B. Sonos’s New Infringement Theories Based on “Playlist Service” and**
 14 **“BigTable” Should be Struck**

15 Attempting to identify what Sonos contends is the “remote playback queue” in the claims of
 16 the ’033 patent has essentially been a game of whack-a-mole, with Sonos’s theories continuing to
 17 change from its infringement contentions, to Dr. Schmidt’s opening infringement report, to his
 18 rebuttal validity report and reply infringement report, and then finally to Dr. Schmidt’s
 19 deposition. This problem is compounded by the fact that each of Sonos’s new theories is internally
 20 inconsistent with the other disclosed theories. Google is addressing that issue in its summary
 21 judgment papers, where it has shown that Sonos’s infringement theories *must* read on the prior art,
 22 regardless of Sonos’s attempt to twist the claims back and forth. For purposes of this motion,
 23 however, the new theories should be stricken from Sonos’s expert reports because Sonos failed to
 24 disclose them in its contentions, as was required under the local rules.

25 ¹ Google withdraws its request to strike paragraphs 109-112 of Dr. Schmidt’s rebuttal report and
 26 paragraph 18 of his reply report. In those paragraphs, Dr. Schmidt introduced a modification to the
 27 Court’s construction that this Court previously rejected, but this modification was included in Dr.
 28 Schmidt’s opening report, and thus the issue of whether Dr. Schmidt has applied a construction
 different than that provided by the Court is more appropriate for *Daubert*, as Google explained in
 its opening motion on these issues. Mot. at 7.

1 1. Sonos’s Contentions Did Not Disclose Its New Infringement Theory That
 2 the Remote Playback Queue is Stored in the Cloud Rather Than
 3 Transmitted to the YouTube Application

4 Sonos’s infringement contentions did not disclose that the accused remote playback queue
 5 is *stored* at a cloud server. Sonos concedes that the narrative portion of its infringement contentions
 6 identified the “remote playback queue” as “a ‘Watch Next’ queue[] *provided by* one or more cloud
 7 servers (*e.g.*, a ‘Watch Next,’ ‘InnerTube,’ or ‘MDx’ server) associated with the [YouTube
 8 services].” Mot. Ex., 1 at 10 (emphasis added); Opp. at 8-9. Indeed, for this aspect of the claims,
 9 Sonos’s contentions point to a Watch Next response *message—i.e.* a message sent from accused
 10 “cloud servers” to the accused “computing device.” Mot., Ex. 1 at 17-25. Sonos’s contentions thus
 11 identified the Watch Next queue as the list of media item identifiers contained in a Watch Next
 12 message that is sent to a YouTube application, not a queue that is stored in the cloud. *Id.* at 7.

13 Sonos argues in its opposition that it did not intend to take the position it disclosed in its
 14 contentions—that the remote playback queue was something “provided by” (*e.g.*, sent) from the
 15 identified servers. Rather, Sonos now argues that what it meant by a remote playback queue being
 16 “provided by” a cloud server was that the remote playback queue merely needs to be “resident on
 17 one or more Google servers.” Opp. at 9. But Sonos’s contentions did not disclose this—the
 18 evidence cited in the contentions for this aspect of the claims discloses only a theory based on the
 19 Watch Next response message, not any storage location on a cloud server.

20 2. Sonos’s Contentions Did Not Disclose Its New Infringement Theory That
 21 the Remote Playback Queue is Stored By the PlaylistService in BigTable

22 Dr. Schmidt’s opening and reply reports also constitute the first time that Sonos disclosed
 23 where and how the “Watch Next queue” is allegedly stored—namely, by the **PlaylistService** within
 24 a distributed storage system called **BigTable**. Mot. at 8. In its opposition, Sonos simply ignores its
 25 new reliance on the **BigTable storage system**, offering no justification for failing to include this
 26 theory in its contentions. Sonos cannot and does not meaningfully dispute this failure; indeed, Sonos
 27 concedes that it did not cite any source code for the **PlaylistService** that would put Google on notice
 28 of its storage theory. Opp. at 12 (“While it is true that Sonos’s contentions did not include a specific
 source code trace for the **PlaylistService** . . .”). Furthermore, Sonos’s contentions only pointed to

1 three specific cloud servers in the context of the remote playback queue: the “Watch Next,”
 2 “InnerTube,” and “MDx” servers. Opp. at 8-9. None of those is the “PlaylistService” servers
 3 accused for the first time in Dr. Schmidt’s reports.

4 Sonos’s argument that it intended to accuse something stored on a PlaylistService server is
 5 further contradicted by the fact that Sonos’s infringement contentions coined the term “Watch Next
 6 queue” to refer to the “remote playback queue,” and the fact that Sonos’s contentions only identified
 7 specific servers that send a “*Watch Next*” message to the accused computing device. In contrast,
 8 the belatedly-identified PlaylistService servers do *not* send “Watch Next” messages. And Sonos’s
 9 expert, Dr. Schmidt, acknowledges that the PlaylistService is distinct from the Watch Next and MDx
 10 servers. Ex. 3 (Schmidt Reply Rpt.) ¶¶ 60, 69. It is simply not credible for Sonos to argue that the
 11 term “Watch Next queue” as coined in its infringement contentions should now be interpreted to
 12 accuse something stored on non-“Watch Next” servers that do not send “Watch Next” messages.

13 3. Google Was Not Put On Notice of Sonos’s New Infringement Theories

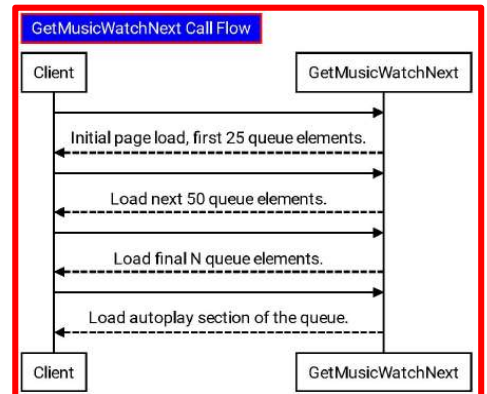
14 Sonos argues that Google “has long understood that Sonos accuses a playback queue in the
 15 cloud” rather than a message providing the media item identifiers from the cloud. Opp. at 9. But
 16 the statements Sonos relies upon relate to Sonos’s claim construction opinions regarding the term
 17 “remote playback queue”—they say nothing about Sonos’s infringement contentions, much less that
 18 those contentions disclose a theory in which a playback queue is stored by the PlaylistService.
 19 Specifically, Sonos points to a statement by Google that it does not infringe because the plain
 20 meaning of “remote playback queue” requires a “third-party playback queue,” and the “CloudQueue
 21 server or MDx” server in the accused YouTube applications are “not supplied by third parties.” *Id.*
 22 (citing Opp., Ex. 6 at 48). Sonos also points to statements in which Google explains Sonos’s
 23 contention that the plain meaning of “remote playback queue” encompasses any playback queue
 24 that is “geographically distant from the computing and playback devices,” regardless of whether it
 25 is provided by a third-party application. *Id.* (citing Dkt. 375 at 2; Dkt. 483 at 6; and Opp., Ex. 7 ¶
 26 87). The reality is that Sonos has provided shifting (and inconsistent) infringement theories
 27 regarding the term “remote playback queue” throughout this litigation, including at the recent
 28 deposition of its expert who seemingly disclaimed his theories that the Watch Next queue is stored

1 in the **PlaylistService**. Dkt. 491-12 at 201:4-17 (“Is the Watch Next queue stored on each of the
 2 services here, the playlist service, playlist document service and Watch Next service? A. I don’t
 3 think I provide an opinion about specifically which service stores the Watch Next queue.”), 212:20-
 4 213:6 (testifying that claims do not require the Watch Next queue to be “stored”). But these
 5 subsequent inconsistent positions do not change Sonos’s contentions, which only accuse a Watch
 6 Next response message provided by “a ‘Watch Next,’ ‘InnerTube,’ or ‘MDx’ server.”

7 Sonos next argues that Google was on notice that Sonos was accusing a Watch Next queue
 8 stored on the **PlaylistService** based on certain “excerpts of Google’s internal documentation” that
 9 Sonos included in its infringement contentions. Opp. at 11-12 (citing Opp., Ex. 5 at 15). But the
 10 citations Sonos points to only confirm that its infringement contentions accuse a Watch Next
 11 message provided by a Watch Next server containing the Watch Next queue—not any structure
 12 stored by a **PlaylistService**. The first relevant page of the contentions discusses the “WatchNext”
 13 servers. Opp., Ex. 5 at 14. The next page—cited by Sonos in its opposition—quoted from two
 14 documents that state: “Queues are sourced from a WatchNext response [message]” and the “first
 15 Watch Next response [message] in a container always contains the queue.” *Id.* at 15 (GOOG-
 16 SONOSWDTX-00039673 and GOOG-SONOSWDTX-00039778). The last excerpt on this page
 17 then discusses how the Watch Next response message sent to a client (*e.g.*, a YouTube application
 18 on a mobile device) is constructed—namely, a “Watch Next request” message sent from a client

19 device determines “what data is returned to [a] client” in the
 20 Watch Next response message, including which media item
 21 identifiers (videoIds) should be fetched from the
 22 **PlaylistService** (via a **PlaylistDocumentService**). *Id.* at 15

23 (GOOG-SONOSWDTX-00039785). On the next page,
 24 Sonos includes [1] an image (reproduced on the right)



25 showing a client device sending Watch Next request messages to a Watch Next server (left to right
 26 arrows) and receiving Watch Next response messages from the Watch Next server in return (right
 27 to left arrows) and [2] a quote that explains that the Watch Next server is the “endpoint” that provides
 28 the “queue renderers when initiating playback.” *Id.* at 16. Sonos’ contentions thus consistently

1 point to the Watch Next messages provided by the Watch Next servers for the “playback
 2 queue.” That information for inclusion in the Watch Next messages is fetched from the
 3 **PlaylistService** is clearly *not* a disclosure of some unidentified queue stored by a **PlaylistService**
 4 server that Sonos contends is the accused remote playback queue. Indeed, the only queue identified
 5 in its contentions is the queue in the WatchNext response message.

6 Despite the fact that its contentions are devoid of any source code for the **PlaylistService**,
 7 Sonos argues that, because it cited to Watch Next source code that communicates with the
 8 **PlaylistService**, Google was on notice of Sonos’s theory that the **PlaylistService** stores the Watch
 9 Next queue. Opp. at 11 (citing **playlist_rpc_container.py** and **_rpc_manager.py**); Opp., Ex. 1
 10 (Schmidt Op. Rpt.) ¶ 248 (identifying the files in Sonos’s contentions under the heading “Watch
 11 Next service” source code). But the code that Sonos points to simply relates to how the Watch Next
 12 response message—the remote playback queue identified by the contentions—is constructed. It does
 13 not relate to the storage of any purported remote playback queue by the **PlaylistService**. Indeed,
 14 Sonos’s expert testified at his deposition that he is now relying on source code for the **PlaylistService**
 15 that was first disclosed in his opening report, *not* the source code for the Watch Next service that
 16 was previously disclosed. Dkt. 491-12 at 212:210:13-214:25. Sonos has had access to the
 17 **PlaylistService code** for nearly a year. If it had truly intended to accuse the new **PlaylistService**
 18 theory disclosed in its expert report, it should have included some reference that code in its
 19 contentions (or in response to Google’s Interrogatory No. 16, which asked Sonos to identify the
 20 “source code it was relying upon to show infringement”). Ex. 4. Because no such disclosure was
 21 made, the Court should strike Sonos’s new **PlaylistService/BigTable** storage theories.

22 4. Sonos’s Remaining Arguments Are Unavailing

23 Sonos makes a number of scattershot arguments to attempt to deflect from its clear failure
 24 to disclose its new theories. First, Sonos argues that its expert cited some of the same documents in
 25 his report as Sonos cited in its infringement contentions. Opp. at 12-13. For example, in Exhibit
 26 10 to its opposition, Sonos showed that GOOG-SONOSWDTX-00039785, which **describes certain**
 27 **aspects of the GetMusicWatchNext process**, was cited in both the contentions and Dr. Schmidt’s
 28 report. *Id.* at 12; Ex. 10. This is true, but it is irrelevant. Google is not arguing that Sonos disclosed

1 *nothing* in its infringement contentions, just that it failed to disclose Dr. Schmidt’s new infringement
 2 theories regarding the remote playback queue with respect to **BigTable and the PlaylistService**. The
 3 critical point here is that Dr. Schmidt also cites to documents and source code that are *not* in the
 4 contentions, including the new source code and documents for the **PlaylistService** that Dr. Schmidt
 5 relied on to construct his new **PlaylistService/BigTable** storage theories. Ex. 1 (Schmidt Op. Rpt.)
 6 ¶ 248 (citing source code for the “**Playlist Service**” and “**Playlist Document Service**”).

7 Second, Sonos attempts to pin the blame for Sonos’s inadequate contentions on
 8 Google. Sonos argues that it moved to compel discovery regarding claim limitation 1.4 (Opp. at
 9 16), and therefore it was somehow deprived of discovery related to the remote playback queue. This
 10 is wrong. Sonos’s motion to compel relates to the Autoplay and UpNext feature of the accused
 11 YouTube applications (Dkt. 377), not the **PlaylistService or BigTable**, which are the aspects of the
 12 products relevant to this motion. In fact, Sonos’s claim that it did not receive discovery on the
 13 **PlaylistService and BigTable** is undermined by the fact that its expert, Dr. Schmidt, cites testimony
 14 from Google witnesses discussing these features. *See, e.g.*, Ex. 3 (Schmidt Reply Rpt.) ¶¶ 50, 51.

15 Sonos also argues that Google should have affirmatively identified the **PlaylistService** in its
 16 interrogatory responses, but does not explain why Google would have known of its relevance given
 17 that Sonos’s contentions do not rely on it in connection with setting out the infringement theories at
 18 issue. Opp. at 16. If Sonos wished to accuse the **PlaylistService and BigTable**, it had access to the
 19 relevant source code for over a year. It charted many different aspects and features of the source
 20 code, but simply did not identify the **PlaylistService and BigTable** until its expert reports.

21 Finally, Sonos’s citation to *Oracle Am., Inc. v. Google Inc.*, 2011 WL 4479305, *3-4 (N.D.
 22 Cal. Sept. 26, 2011) is inapposite. The *Oracle* Court found that the plaintiff’s expert report did not
 23 “invoke a new infringement theory” and that its infringement contentions identified the specific
 24 source code functions the expert relied upon. *Id.* at *2. In contrast, Sonos has invoked an entirely
 25 new theory that the **PlaylistService** stores the “a remote playback queue,” and its contentions do not
 26 cite to *any* source code for the **PlaylistService**. And unlike in *Oracle*, Google served an
 27 interrogatory requesting that Sonos identify the accused source code, yet Sonos did not identify the
 28 source code it now relies on for its **PlaylistService/BigTable** storage infringement theory. Ex. 4

(Sonos Resp. to Interrogatory No. 16).

C. Sonos’s Undisclosed Infringement Theory for Hub Devices Should be Struck

Sonos tacitly concedes that two highly specific playback paths that Dr. Schmidt newly accuses of infringing the asserted claims were not disclosed in its infringement contentions. *See* Mot. at 9-10.² Instead of arguing that it disclosed these theories (which it cannot), Sonos first provides a laundry list of meritless excuses for its failure to disclose, then contends Google should have been able to deduce at least the voice command pathway theory from its contentions, and finally nonsensically blames Google for not responding to Sonos’s admittedly undisclosed theories. Opp. at 17-21. Sonos’s assertion that Google should have engaged in a mind-reading exercise to discover Sonos’s undisclosed Hub device infringement arguments is illogical.

1. Sonos’s Failure to Disclose the Two Playback Paths Is Inexcusable and Cannot Be Attributed to Google’s Discovery Responses

First, Sonos contends that it was not required to identify *any* particular playback paths as infringing because under the claims, it is only the “*programmed capability*” that was relevant rather than any specific ‘playback path.’” Opp. at 17-18 (emphasis in original). According to Sonos, the “identified examples of initiating playback at the Hub device” in its contentions were meant “*to demonstrate*”—but not limit—the claimed programmed capabilities “given that the asserted claims are directed to capability.” *Id.* at 18 (emphasis in original). In other words, because the asserted claim is a system claim, Sonos argues that it did not actually need to identify the specific ways in which the Hub Device is “configured for playback of a remote playback queue.” Unsurprisingly, Sonos cites no authority for this baseless position. As the party with the burden of proving infringement, Sonos was required to “crystallize its infringement theories early on” to prevent a shifting sands approach to litigation. *Fresenius Medical Care Holdings, Inc. v. Baxter Intern., Inc.*, 2006 WL 1329997, at *4 (N.D. Cal., May 15, 2006) (citations omitted); *see* P.L.R. 3-1(c). Sonos’s position would essentially eviscerate the notice function of the local rules; Sonos cannot broadly

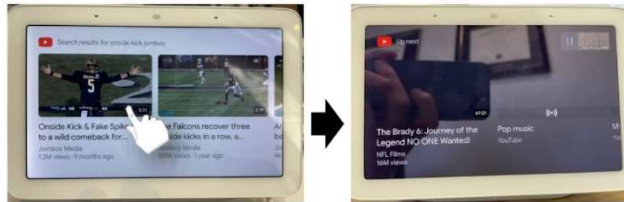
² More specifically, the new infringement theories are: (1) in a first playback path, a user casting could cast content to the Hub from her mobile device and then using the Hub device to *again* cast that same content on to a second Hub device and (2) in a second playback path, a user could orally commanding the Hub device to begin playback and then using that same Hub device to cast the same content to a second Hub device. Mot at 9-11.

point to the accused product generally during fact discovery so that it can later argue that every unmentioned “programmed capability” of that product was accused.

Second, Sonos next argues that Google should have somehow *gleaned* that Sonos was accusing at least the new voice command playback path from a statement regarding voice commands found in a Google support page cited within Sonos’s contentions. Opp. at 18. But the statement itself was not even mentioned in Sonos’s infringement contentions, and it is clear that Sonos cited this generic support page merely to show a Hub device can run the YouTube application. Opp., Ex. 5 at 8. Indeed, the quotation Sonos includes from that webpage makes no mention of oral commands and simply conveys the ability to use YouTube with a Hub device. *Id.* The associated diagrams show a user *physically* operating a Hub device with his or her finger, not using any voice commands:

<https://support.google.com/googlenest/answer/9165738?hl=en> (“With YouTube built-in to your Google Nest display, you can watch YouTube Originals, how-to videos and much more, seamlessly on your screen.”).

Cast-enabled displays installed with various of Google’s own Cast-enabled apps are programmed to perform this functionality, including but not limited to the YouTube and YouTube Music apps, as illustrated by the following photos:



Opp., Ex. 5 at 8 (annotated with highlighting). And Sonos’s contentions do not cite to any source code relevant to the activation of voice commands. This generic support page—combined with the lack of any other relevant contention—simply does not disclose the newly accused theory.

Relatedly, the Court should also reject Sonos’s argument that its failure to identify voice commands is excusable because it is akin to Google’s citation to a video about the prior art YouTube Remote in Google’s invalidity contentions. Opp. at 18. Sonos is comparing apples and oranges. Google’s invalidity contentions did not merely cite to a YouTube Remote video but rather specifically identified the relevant features and functionality that it was relying on in its invalidity contentions, including by providing screenshots of the video that identified the relevant YouTube Remote functionality and excerpting documents that identified the relevant messages. *See* Dkt. 255 at 10-11. Sonos’s contentions do no such thing—instead, those contentions make clear that Sonos accused only a single playback path: initiating playback on the Hub Device using the display.

1 Third, Sonos closes with number of arguments that improperly attempt to shift Sonos’s
 2 burden of proving infringement onto Google. Sonos asserts is that Google should have described
 3 the newly accused playback paths it contends are “substantially different” in its response to an
 4 interrogatory seeking a description of how the accused hardware devices receive and play back
 5 media from the accused software applications. Opp. at 19-21. But Google was not obligated to
 6 discern the instrumentalities relevant to Sonos’s undisclosed infringement theories, search for
 7 evidence regarding those theories, and then explain how those un-accused instrumentalities worked,
 8 as Sonos argues. *Smart Wearable Techs. Inc. v. Fitbit Inc.*, 2018 WL 659013, at *1 (N.D. Cal. Feb.
 9 1, 2018) (“[T]he purpose of infringement contentions is to put the defendant on notice of the
 10 plaintiff’s theory of liability and to shape the scope of discovery and litigation.”). And to the extent
 11 Sonos claims that this dispute turns on the completeness of interrogatory responses, all of Sonos’s
 12 new infringement theories should be struck because Sonos never identified *any* of the source code
 13 for these newly accused playback paths in its response to an interrogatory requesting identification
 14 of all source code that Sonos relied upon for infringement. Ex. 4.

15 2. The Identified Paragraphs Of Dr. Schmidt’s Reports Should Be Struck

16 The Court should also disregard Sonos’s assertions that Google “mischaracterizes” certain
 17 paragraphs of Dr. Schmidt’s reports. Opp. at 19. First, Sonos argues that portions of paragraphs
 18 178 and 247 of his opening report relate to theories other than the two at issue. But these paragraphs
 19 are almost exclusively directed to his new theories (initiating playback on a Hub device using casting
 20 or using voice activation). Mot., Ex. 2 ¶¶ 178, 247. For example, paragraph 247 of Dr. Schmidt’s
 21 opening report points to source code for his new theory of initiating playback on a Hub device using
 22 casting, and paragraph 178 refers to initiating playback using “a voice input.” See Mot., Ex. 4
 23 (Bhattacharjee Reb. Rpt.) ¶ 189, Ex. 2 ¶ 178. For avoidance of doubt, Google does not move to
 24 strike any *de minimis* disclosure related to physical usage of the Hub device.³

25 Second, Sonos argues that paragraphs 146-149 and 152-155 of Dr. Schmidt’s reply report
 26

27 ³ Specifically, Sonos *appears* to be referring to the following quotes from paragraph 178: “Enjoy
 28 videos on YouTube.... And listen to music with YouTube Music” and “[Y]ou can . . . use the
 touchscreen display to do the same.” Google withdraws its request to strike these disclosures.

1 should not be stricken because they “rebut arguments” made by Google’s expert (Opp. at 19), but
 2 they clearly relate to Dr. Schmidt’s new Hub device infringement theories. Mot., Ex. 5. For
 3 instance, in paragraphs 146-149, Dr. Schmidt argues that his newly accused voice input theory
 4 satisfies the claims. In paragraphs 152-155, Dr. Schmidt argues that a Hub Device is a “computing
 5 device” in his newly accused theory where playback on the Hub Device is initiated via a Cast
 6 session. *Id.* These theories were not disclosed in Sonos’s contentions and thus should be struck.

7 **D. Sonos’s New Doctrine of Equivalents Arguments Could and Should Have Been**
 8 **Disclosed Prior to Dr. Schmidt’s Rebuttal Report**

9 Sonos does not dispute that Dr. Schmidt’s new doctrine of equivalents arguments addressing
 10 the “remote playback queue” element of Limitations 1.4, 1.7, and 12.1 of the ’033 patent were never
 11 disclosed in Sonos’s opening expert report or infringement contentions as required by the Patent
 12 Local Rules. *See* Opp. at 21. Instead, Sonos attempts to shift the blame to Google by asserting that
 13 these untimely DoE theories merely respond to allegedly “late-breaking” noninfringement theories
 14 of Google’s expert, Dr. Bhattacharjee. *Id.* Specifically, Sonos references Dr. Bhattacharjee’s
 15 opinion that Dr. Schmidt has failed to show that a “computing device” (*e.g.*, a mobile phone) in the
 16 accused YouTube systems is configured for playback of a “remote playback queue provided by a
 17 cloud-based computing system” (Limitation 1.4), let alone that playback responsibility of this same
 18 “remote playback queue” is transferred to a playback device (Limitation 1.7).⁴ *Id.* at 22.

19 As explained in Google’s opposition to Sonos’s motion to strike, Sonos’s assertion that
 20 Google “first advanced these new non-infringement arguments” in Dr. Bhattacharjee’s rebuttal
 21 report is incorrect. *Id.* at 22; *see* Dkt. 492 at 15-17. Google’s responses to Sonos’s Interrogatory
 22 Nos. 12 and 15 each (i) explained how Sonos failed to show that the accused computing devices
 23 (*e.g.*, phones running the accused YouTube applications) are configured to play back a “**remote**
 24 playback queue” (Limitation 1.4) and (ii) provided a detailed example describing how computing
 25 devices are instead configured for playback of a **local** queue. Opp. at 16-17. Sonos had obviously
 26 failed to identify “**the** [same] remote playback queue” for which playback responsibility is

27 ⁴ The ’033 patent requires that the computing device be configured for playback of “**a** remote
 28 playback queue provided by a cloud-based computing system” and that playback responsibility for
 “**the** remote playback queue” then be transferred to the playback device (Limitations 1.4 & 1.7).

1 transferred to the playback device (Limitation 1.7) given that it never identified “a remote playback
2 queue provided by a cloud-based computing system” (Limitation 1.4) in the first place. *Id.*

3 But even if Google had not put Sonos on clear notice of its noninfringement positions, Sonos
4 cannot plausibly contend it was unaware that the “remote playback queue” in Limitations 1.4 and
5 1.7 must be one in the same until it received Dr. Bhattacharjee’s rebuttal report. It is a well-
6 established principle that “claim terms based on an antecedent relationship . . . carry the same
7 meaning throughout the claims.” *Sensor Elec. Tech., Inc. v. Bolb, Inc.*, 2019 WL 4645338, at *17
8 (N.D. Cal. Sept. 24, 2019) (internal citations omitted)). As the party with the “burden of proving
9 infringement . . . either literally or under the doctrine of equivalents,” Sonos should have considered
10 this fundamental tenet of claim language interpretation and proffered all of its potential theories at
11 the outset. *HSU v. Thorsen Tool Co.*, 2014 WL 12570922, at *2 (C.D. Cal. Oct. 17, 2014).

12 Perhaps recognizing this, Sonos pivots to mischaracterizing Dr. Bhattacharjee’s opinions in
13 order to cast them as “new.” To be clear, Dr. Bhattacharjee and Google are *not* now asserting that
14 the “contents” or the “location” of the accused “remote playback queue” cannot change. Opp. at
15 22. Google’s position since the very beginning, as articulated in its interrogatory responses, has
16 been that Sonos has failed to identify *any* “remote playback queue” *at all* that a computing device
17 (*e.g.*, a phone) is configured to play back—let alone one that is played back both before and after
18 playback responsibility has been transferred to the playback device. *See* Dkt. 492 at 16 (citing Dkt.
19 463-8 at 60 and Dkt. 491-10 at 14). Sonos’s attempt to link Dr. Schmidt’s new DoE theories to Dr.
20 Bhattacharjee’s rebuttal report is a transparent effort to make an end-run around its disclosure
21 obligations after failing to prove literal infringement. Accordingly, these theories should be struck.⁵

22 **II. CONCLUSION**

23 For the foregoing reasons, Google requests that the Court grant Google’s motion to strike.
24

25 _____
26 ⁵ Google maintains that the discovery violations are too severe to grant any relief other than striking
27 the identified portions of Dr. Schmidt’s reports. However, to the extent that the Court is inclined
28 not to strike Dr. Schmidt’s previously undisclosed theories, Google respectfully requests that it be
permitted to serve a supplemental expert report addressing the new DoE theory and to take an
additional deposition of Dr. Schmidt. Sonos’s DoE theory is directed at claims the applicant
narrowed during prosecution, and Sonos should not be permitted to recapture this surrendered scope.

1
2 DATED: February 17, 2023

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3
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CERTIFICATE OF SERVICE

Pursuant to the Federal Rules of Civil Procedure and Local Rule 5-1, I hereby certify that, on February 17, 2023, all counsel of record who have appeared in this case are being served with a copy of the foregoing via the Court's CM/ECF system and email.

DATED: February 17, 2023

By: /s/ Charles K. Verhoeven
Charles K. Verhoeven